JA

#12

PCT09

RAW SEQUENCE LISTING
PATENT APPLICATION:. US/09/979,549

DATE: 12/04/2001
TIME: 11:51:40

ENTERED

Input Set : A:\es.TXT
Output Set: N:\CRF3\11212001\I979549.raw

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  4 <110> APPLICANT: INSTITUT NATIONAL DE LA RECHERCHE AGRONOMIQUE (INRA)
  5        GAUTIER, Marie-Franoise
  6        IHORAI, Tania
  7        JOUDRIER, Philippe
 10 <120> TITLE OF INVENTION: PROMOTER OF THIOREDOXINE TaTrxh2 IN
 11        WHEAT
 13 <130> FILE REFERENCE: ORES10.001APC
C--> 15 <140> CURRENT APPLICATION NUMBER: US/09/979,549
C--> 16 <141> CURRENT FILING DATE: 2001-11-20
 18 <150> PRIOR APPLICATION NUMBER: FR 9906231
 19 <151> PRIOR FILING DATE: 1999-05-17
 21 <150> PRIOR APPLICATION NUMBER: PCT/FR00/01318
 22 <151> PRIOR FILING DATE: 2000-05-17
 24 <160> NUMBER OF SEQ ID NOS: 2
 26 <170> SOFTWARE: FastSEQ for Windows Version 4.0
 28 <210> SEQ ID NO: 1
 29 <211> LENGTH: 2687
 30 <212> TYPE: DNA
 31 <213> ORGANISM: Triticum aestivum
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 35 <222> LOCATION: (1112)...(1231)
 37 <221> NAME/KEY: intron
 38 <222> LOCATION: (1232)...(2203)
 40 <221> NAME/KEY: exon
 41 <222> LOCATION: (2204)...(2326)
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 44 <222> LOCATION: (2327)...(2420)
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 47 <222> LOCATION: (2421)...(2558)
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 61 cgcttttctc cttgggtggg cgcgcgagct ccccgagttt gagccgcaat ttttttacat 180
 62 tttatggcga tggcgtcagg cgtttatcta ggcgtctggg agggtacatt tgaagatgtg 240
 63 ccaccaactc caaaccgaca accctgtatc tgagcatgcc tcatgcctct ccttcatgcc 300
 64 tccctttggg tgaggtcatg tgcccttggc ggcgagtggc ttcccgttta gagcaagtat 360
 65 aataagtcct agtcagctgg ctataagatg ttccacatca gcaaatcctt aaactggagg 420
 66 agaaagaaag taggagtgag aagggcgtcg cgcttcgtc aatcgctagc gatagcacaa 480
 67 gctcccatgg aatcgagcca acatgcaacc cgcacaatga ctaaaggcaa acgccagcca 540
 68 atcagtatgc ctttctctgc atctttcttc atgcaagcat taaatactat agctaatcta 600
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69 cagccagttt attatataaa caggctatat agctgacctg gcagtgctat agagccggca 660
70 gccggctctt ctattagctt tgctcttatg gctacatctg tgtgagcagt cgattgattc 720
71 aaacaacaaa tccgggcgtt cagcaagtcg gaatgaattt cggctcatca ctcattgtcg 780
72 tgggcctcac gcgtattcgc ctaaccgtgt ttgaatcaga ccctcacgaa gccacggctc 840
73 cagcgacccg ttcaccacgt cagcctaaaa aaagaaaaaa aaactgttca atcacacgcc 900
74 catctgaacc gttcaacagc cccacgtaat ttcgcgcacc agcaaagggc atatccgtca 960
75 tagcgagcgc ataaattctg attcctgcct gcctgccgga caatttatct ttggggaggc 1020
76 gggccgggat tggagacaga gcccacaagg caacaacaaa gtgcgcgtga gaaatcaaca 1080
77 agcggtgctt gccgagaaga gagagagaga g atg gcg gcg tcg gcg gcg acg    1132
78                                     Met Ala Ala Ser Ala Ala Thr
79                                      1               5
81 gca acg gcg gcg gcg gtg ggg gcg ggg gag gtg atc tcc gtc cac acc 1180
82 Ala Thr Ala Ala Ala Val Gly Ala Gly Glu Val Ile Ser Val His Thr
83        10              15              20
85 ctg gag cag tgg acc atg cag atc gag gag gcc aac gcc gcc aag aag 1228
86 Leu Glu Gln Trp Thr Met Gln Ile Glu Glu Ala Asn Ala Ala Lys Lys
87     25              30              35
89 ctg gtacgcatct ttccggatcg atctctccct ccccctcgt cttctcccgc       1281
90 Leu
91   40
93 aaggcggcac gggccgggcg aggatgctct tgtttcagat tggttggtga agttaagacc 1341
94 tggctcgtgc atgcggtggc cgcccgagga cgaatctgcg gttggtctgg ttgaattttg 1401
95 atggcttgga gagcatgtta cggtcggttt cttttccccg tcttattagg gctgccgtgg 1461
96 atatcatctt ctcatgttaa aaaggagaca gtttcagaac cgcgtgtacc gctacttcct 1521
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104 actgtaccag gaatttatat gatgatcatc ttgttgtttg tatatatttt tttgcggggg 2001
105 agtttataac tttccgtgga ttttcatctc tgaaattgtg gaacatcata aaattccagt 2061
106 gctattctct tcacgtgaat tataacctgg attgattgta agctctggta ggtgtttatg 2121
107 gtgttgaact agcagtagca ttattgaccc atgctttgca catttgtgtc aaggtcctgt 2181
108 taaccttgtc gtttgtaaca gg tgg tgg ttg act tca ctg cat cat ggt gtg 2233
109                         Trp Trp Leu Thr Ser Leu His His Gly Val
110                                             45                  50
112 gac cat gcc gca tca tgg ctc cag ttt tcg ctg atc tcg cca aga agt 2281
113 Asp His Ala Ala Ser Trp Leu Gln Phe Ser Leu Ile Ser Pro Arg Ser
114                55              60              65
116 tcc caa atg ctg ttt tcc tca agg tcg atg tcg atg aac tga agg    2326
117 Ser Gln Met Leu Phe Ser Ser Arg Ser Met Ser Met Asn  *   Arg
118            70              75              80
120 taatggaacc gatggcgctg tttacagagc acagagtatc atcgtgcgat ttcagagctg 2386
121 tgttactaac aaggttttat gttgtatgaa cagc cca ttg cgg agc aat tca gcg 2441
122                                       Pro Leu Arg Ser Asn Ser Ala
123                                                       85
125 ttg agg cca tgc caa cct tcc tgt tca tta agg aag gag atg tca agg 2489
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126 Leu Arg Pro Cys Gln Pro Ser Cys Ser Leu Arg Lys Glu Met Ser Arg
127         90                  95              100
129 aca ggg ttg tgg gag cta tca agg agg aac tga cga aca agg ttg ggc  2537
130 Thr Gly Leu Trp Glu Leu Ser Arg Arg Asn  *  Arg Thr Arg Leu Gly
131        105                 110                 115
133 tac acg cgg cgg ccc agt aat cacctagcgg agtagtattc gcctaaataa     2588
134 Tyr Thr Arg Arg Pro Ser Asn      ·
135        120                 125
137 aattgtggct caagaagcgg tgcctctaat ggcaccttat atcctgtgta ctgcttgtta 2648
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141 <211> LENGTH: 1111
142 <212> TYPE: DNA
143 <213> ORGANISM: Triticum aestivum
145 <400> SEQUENCE: 2
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147 agacgacggg gcggcatgtg cctgttcctt ggcgaggcgt ctagctttgg cagccgccgc 120
148 cgcttttctc cttgggtggg cgcgcgagct ccccgagttt gagccgcaat ttttttacat 180
149 tttatggcga tggcgtcagg cgtttatcta ggcgtctggg agggtacatt tgaagatgtg 240
150 ccaccaactc caaaccgaca accctgtatc tgagcatgcc tcatgcctct ccttcatgcc 300
151 tccctttggg tgaggtcatg tgcccttggc ggcgagtggc ttcccgttta gagcaagtat 360
152 aataagtcct agtcagctgg ctataagatg ttccacatca gcaaatcctt aaactggagg 420
153 agaaagaaag taggagtgag aagggcgtcg gcgcttcgtc aatcgctagc gatagcacaa 480
154 gctcccatgg aatcgagcca acatgcaacc cgcacaatga ctaaaggcaa acgccagcca 540
155 atcagtatgc ctttctctgc atctttcttc atgcaagcat taaatactat agctaatcta 600
156 cagccagttt attatataaa caggctatat agctgacctg gcagtgctat agagccggca 660
157 gccggctctt ctattagctt tgctcttatg gctacatctg tgtgagcagt cgattgattc 720
158 aaacaacaaa tccgggcgtt cagcaagtcg gaatgaattt cggctcatca ctcattgtcg 780
159 tgggcctcac gcgtattcgc ctaaccgtgt ttgaatcaga ccctcacgaa gccacggctc 840
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161 catctgaacc gttcaacagc cccacgtaat ttcgcgcacc agcaaagggc atatccgtca 960
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163 gggccgggat tggagacaga gcccacaagg caacaacaaa gtgcgcgtga gaaatcaaca 1080
164 agcggtgctt gccgagaaga gagagagaga g                                1111
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VERIFICATION SUMMARY
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L:16 M:271 C: Current Filing Date differs, Replaced Current Filing Date